

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – OFFICE OF ENFORCEMENT
OCTOBER 2, 2007**

ITEM 9

SUBJECT

CONSIDERATION OF A RESOLUTION OF STATE WATER RESOURCES CONTROL BOARD ON PRIORITY SOLUTIONS TO REDUCING AND PREVENTING MARINE DEBRIS

DISCUSSION

Since the 1970s, marine debris has been widely recognized as a threat to the marine environment. Research shows that, despite global treaties to prevent dumping at sea and increasing efforts world-wide to protect water quality, the quantity of debris in the world's oceans is increasing. Using the term "marine debris" does not mean this is strictly a coastal issue. A large percentage of marine debris originates inland, and thus impacts our creeks, rivers, and other waters of the State of California.

Numerous government agencies are now focusing on marine debris. The California Ocean Protection Council (COPC) passed a resolution in February 2007 on reducing and preventing marine debris and established a Marine Debris Steering Committee of which the State Water Board is a member. There is also pending legislation that touches on marine debris issues.

Given the State and Regional Water Boards' (Water Boards) water quality protection authority; the Water Boards are well-positioned to make marine debris a priority matter in addition to and beyond our contribution to the COPC's Marine Debris Steering Committee. The Water Boards have already taken a number of actions to address marine debris issues including requirements for gross solids excluders and the control of pre-production resin pellets through the industrial storm water permitting program. In addition, over the years, the State Water Board has funded many projects designed to keep our beaches and ocean water safe and clean.

At the instigation of the Executive Director, a Marine Debris Working Group was established in July, 2007. The group was comprised of State and Regional Water Board representatives. The group's purpose is to ensure cross-program communication and coordination on marine debris-related work, and to frame recommendations for improvements, increased level of effort or focus, or potential new initiatives related to the control of marine debris.

Consistent with its charge, the Marine Debris Working Group has developed a resolution that it brings to the State Water Board for consideration and adoption that identifies priority solutions for reducing and preventing marine debris.

POLICY ISSUE

Not Applicable

FISCAL IMPACT

None

REGIONAL BOARD IMPACT

The Regional Water Boards may be encouraged to adopt similar resolutions.

STAFF RECOMMENDATION

Staff Recommends adoption of this Resolution.

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STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2007-

RESOLUTION OF THE STATE WATER RESOURCES CONTROL BOARD ON PRIORITY SOLUTIONS TO REDUCING AND PREVENTING MARINE DEBRIS

WHEREAS:

1. Since the 1970s, marine debris has been widely recognized as a threat to the marine environment;
2. Despite global treaties to prevent dumping at sea and minimize land-based sources, and increasing efforts worldwide to protect water quality, the quantity of marine debris in the world's oceans is increasing;
3. The problem of plastic marine debris is increasing in California and the North Pacific Gyre, where densities of micro-plastics have tripled during the last decade;
4. 60 to 80 percent of all marine debris and 90 percent of floating debris is plastic;
5. Floating plastic attracts organisms that are subsequently transported to distant habitats contributing significantly to invasive species propagation;
6. The U.S. Department of Commerce estimates that 80 percent of marine debris comes from land-based point and non-point sources;
7. Plastic lasts hundreds of years or longer in the environment without biodegrading;
8. By ingestion, entrapment and entanglement, plastic harms hundreds of wildlife species, some of which are threatened or endangered species under California or federal law;
9. Plastics can contain potentially harmful constituents such as phthalates, bisphenol A, styrene, vinyl chloride and flame retardants. Research is being conducted to determine whether water leaches these constituents out of plastic products, presenting a threat to the health of humans and wildlife;
10. Thermoplastic resin pellets (commonly called "nurdles"), plastic powders, and production scrap, all of which are mistaken as food by marine life, are a significant source of beach and marine pollution. A 1998 survey conducted in Orange County estimated that over 100 million nurdles were polluting Orange County beaches alone – this represented over 98 percent of all of the pollution collected in terms of abundance and 17 percent in terms of weight;
11. The U.S. Department of Commerce estimates that ocean-based sources constitute 20 percent of plastic marine debris, including lost and abandoned fishing gear that can be dangerous to wildlife, boaters and divers. Since May 2006, the California Derelict Fishing Gear Removal Project has removed nearly 10 tons of gear from waters around the California Channel Islands;

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12. Plastic and trash litters our beaches and represents a threat to California's ocean-dependent economy;
13. The California Ocean Protection Council passed a resolution on February 8, 2007 highlighting the issues concerning marine debris; and
14. The State Water Resources Control Board (State Water Board) has statutory authority to implement a broad range of solutions to address the problem of marine debris.

THEREFORE, BE IT RESOLVED THAT:

The State Water Board:

Intends to call attention to this problem by widely distributing this resolution; and identifies the following top priority approaches:

1. *Coordinate a Marine Debris Steering Committee:* State Water Board staff is directed to maintain a Marine Debris Steering Committee to implement the recommendations of this Resolution. The Steering Committee will include staff of the State Water Board and the Regional Water Boards. The Steering Committee will work with other agencies and stakeholders who are responsible for addressing marine debris problems.
2. *State Water Board Staffing:* The State Water Board acknowledges that marine debris is a significant issue that requires substantial regulatory oversight to ensure a significant reduction in marine debris emanating from California. The State Water Board will make the most efficient use of its resources to address this critical pollution issue. The State Water Board intends to identify staffing and resource needs and to pursue additional funding.
3. *Municipal NPDES Storm Water Permits:* The State Water Board supports the Regional Water Boards' efforts to bolster permit requirements for municipalities to ensure that trash does not enter the State's waters and, if trash is entrained in state waters, that it is removed prior to discharge to the marine environment.

The State Water Board recommends that Municipal Storm Water Permits require increased enforcement of anti-litter laws and in general, recommends an increase in the availability of trash, recycling, and cigarette butt receptacles at public places, schools, and commercial establishments statewide. In addition, permittees are encouraged to identify trash impacted receiving waters and significant trash source areas, and to assess impaired urban stream tributaries, using trash assessment tools. Subsequently, the State Water Board hopes that the permittees will significantly reduce trash found in the urban runoff and receiving waters by increasing municipal trash management measures, including trash capture devices.

Municipal Storm Water Permits require cities to have outreach and education programs regarding best management practices that address storm water discharges. The State Water Board believes that cities subject to the municipal permit could contribute to the Environmental Education Initiative as an alternative to implementing local outreach and education programs related to marine debris pollution from storm water discharges.

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4. *Industrial and Construction General NPDES Storm Water Permits:* The State Water Board intends to maintain strict requirements in its Industrial and Construction General Permits for the control of debris emanating from industrial and construction facilities.

State and Regional Water Board staff have developed the Resin Initiative for Control and Enforcement (RICE), to focus permitting and enforcement on plastic processing facilities throughout California. The General Industrial Stormwater Permit is the primary enforcement vehicle to remove nurdles (plastic pellets) and plastic powders from the industrial waste stream. However, since nurdle pollution is caused by both nurdle transporters and handlers--entities who are not covered by the General Industrial Storm Water Permit--the Regional Water Boards are encouraged to conduct enforcement using the California Water Code and the Federal Clean Water Act.

5. *California Ocean Plan:* The California Ocean Plan is the State's water quality control plan for ocean waters. Currently the water quality objectives of the 2005 Ocean Plan do not specifically address plastic debris or other trash. According to State Water Board direction in Resolution No. 2005-0080 (California Ocean Plan Triennial Review and Work Plan 2005-2008) staff is required to develop an amendment to address plastic debris. The State Water Board will consider amending the Ocean Plan's objectives to protect beneficial uses from plastic and other trash and the Ocean Plan's program of implementation to specifically control discharges of plastic and other trash into the ocean.
6. *Total Maximum Daily Loads (TMDL) for Trash:* Some trash TMDLs have been adopted for trash-impaired water bodies, listed pursuant to Clean Water Action section 303(d). The State Water Board encourages the Regional Water Boards to adopt TMDLs for trash for 303d listed waters in areas that have high potential to reduce the marine debris load.
7. *Expand the CRV Program:* The State Water Board supports the California Redemption Value Program (CRV) as it has proven to be enormously successful by diverting over 60 percent of aluminum, glass, and certain plastic containers to recycling centers. The State Water Board intends to work with the Department of Conservation in exploring options for collaboration on programs that could reduce the volume of plastic commonly found in marine debris. The State Water Board encourages greater recycling of all forms of plastic containers.
8. *Reduce Use of Plastics in General:* The State Water Board discourages the use of non-recyclable plastics and encourages the use of recyclable plastics. Therefore, State Water Board staff and Board members will evaluate the use of plastics in their workplace and strive to eliminate the use of all non-recyclable plastics and reduce the use of plastics in general.
9. *Seek innovative methods to reduce plastic waste:* In cooperation with the Ocean Protection Council, Department of Conservation (DOC), Department of Toxic Substances Control (DTSC) and California Integrated Waste Management Board (CIWMB), the State Water Board will investigate and support plastic packaging alternatives that biodegrade in the marine environment, that contain no potentially toxic materials, and that reduce the amount of plastic debris commonly found in the marine environment.

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10. *Continue and expand watershed-based cleanups:* Regular cleanups in trash-prone areas reduce the adverse effects of marine debris and promote environmental stewardship. In 2006, volunteers at California's Coastal Cleanup Day collected nearly a million pounds of trash and recyclables. The State Water Board supports the continuation and expansion of the watershed and beach cleanups currently run by the state, local governments, and non-profit organizations. In addition, the State Water Board will authorize members of its staff to spend up to five work days each year participating in litter collection efforts.
11. *Promote environmental education and outreach on the impacts of plastic debris and litter prevention:* The California Department of Transportation (Caltrans) operates an innovative statewide trash reduction campaign called "Don't Trash California." The State Water Board will work to coordinate efforts with Caltrans, DOC, and other state and local entities to promote a consistent "Don't Trash California" message that underscores the marine impacts.
12. *Monitoring Information:* The State Water Board supports the creation of a monitoring program to determine trends in plastic debris found on beaches, in coastal ocean and bay waters, and in coastal streams. This monitoring should be performed periodically to determine whether the State's regulatory efforts are effective in reducing plastic debris in California's coastal marine waters?

CERTIFICATION

The undersigned Acting Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 2, 2007.

Jeanine Townsend
Acting Clerk to the Board